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ABSTRACT

This paper provides a review of research that examined transformational leadership in the context of K-12 school restructuring. It presents a rationale for studying transformational leadership, a theoretical framework for such study, and findings of six studies about the effects of transformational leadership. The framework is comprised of external influences, individual leader internal processes, leadership practices, mediating variables, and student outcomes. Conclusions are: (1) Transformational leadership contains interdependent and equally important dimensions; (2) transformational leadership initiatives can be hindered if they ignore individual consideration; (3) transformational leadership practices are themselves contingent; (4) expert thinking lies behind effective leadership practices and is not contingent; (5) distinctions between management and leadership cannot be made in terms of overt behavior; and (6) the dimensions of transformational leadership require modification when applied to schools. Two figures are included. (Contains 113 references.) (LMI)

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Contributions of Transformational Leadership To School Restructuring

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Introduction

> *Out of the varying motives of persons, out of the combat and competition between groups and between persons, out of the making of countless choices and the sharpening and steeling of purpose, arise the elevating forces of leadership and the achievement of intended change (Burns, 1978, p. 432).*

This paper reviews the research in which my colleagues and I have been engaged since about 1990 around the idea of transformational leadership in the context of K-12 school restructuring. After some initial stage-setting observations, three matters are addressed:

- the case for seriously considering transformational school leadership and why sustained inquiry about its nature, causes and consequences is warranted;
- the overall framework which has guided our studies of transformational leadership;
- what has been learned from these studies about the effects of transformational leadership, its overt nature as it appears in schools, and the internal thought processes which give rise to it among school leaders. As part of the summary of these results, the more detailed theoretical perspectives giving rise to them are described; research methods are touched on lightly, as well.

The stage-setting observations are about three matters. First, this is not intended to be a comprehensive review of literature. Rather, the focus will be limited primarily to summing up the core of what has been learned in my own "shop" after about three years of fairly intense

work in collaboration with my two full-time research associates (Rosanne Steinbach and Doris Jantzi), an assistant superintendent in British Columbia who collaborates extensively with us (Byron Dart), an Australian university colleague (Halia Silins) and a handful of my doctoral students who have immersed themselves in this aspect of our research program[1].

Second, there are two related but distinct meanings of transformational leadership, both of which are reflected in our studies. One meaning I term "generic": from the standard definition of the word "transform" (to change in character or condition), generic meanings of transformational leadership include whatever leadership practices foster significant growth not only in the overt practices of those experiencing such leadership - teachers, for example - but their capacities and motivations as well. Influenced by this generic meaning, some of our studies have begun by identifying school sites in which such changes are evident and then, using qualitative, grounded methods, have inquired about the nature of the leadership practices helping to account for such changes. There is also a "technical" meaning associated with transformational leadership; this meaning, described in detail later, dates back at least to Weber's (1947) early work on charisma, with its contemporary formulation largely to be found in the work of Burns (1978), Bass and his colleagues (1985), House (1977), Tichy and Devanna (1986), Conger (1987), and a plethora of recent studies carried out in many non-school contexts. Most of these recent studies consist of the "normal science" of formal theory testing and refinement. Some of our studies in school settings also have taken this form using both quantitative and qualitative methods.

Finally, I support recent conceptual and practical efforts to distribute leadership broadly throughout the school organization. These efforts, however, have not yet addressed carefully enough the consequences for those in formal leadership roles, especially school principals. Much of the research described in this paper was intended specifically to clarify those consequences.

The Case for Transformational School Leadership

Transformational approaches to school leadership are especially appropriate to the challenges facing schools now and through the remainder of this decade: these approaches ought to be advocated more strongly to practicing school administrators and featured much more prominently in the preparation experiences of those aspiring to formal school leadership positions. The argument developed for this claim in this section rests on two assumptions. One assumption is that "instructional leadership" is the single most preferred image of K-12 school leadership, at present, and has been for the past decade (e.g., Greenfield, 1987; Mortimore & Sammons, 1987; Beck & Murphy, 1993); although not sufficient, the case for widely adopting a transformational image must necessarily clarify why instructional leadership images are no longer adequate. This assumption, it should be noted, in no way denies the existence and value of other competing leadership images (for example Sergiovanni's (1992) "moral leadership", Duke's (1986) aesthetic leadership or Sashkin's (1988) visionary leadership); only that they have not approximated the level of prominence among scholars and practicing administrators as has instructional leadership.

Leadership only manifests itself in the context of change and the nature of that change is a crucial determinant of the forms of leadership which will prove to be helpful. A second assumption is that school restructuring will dominate the change agenda for school leaders for some time to come.

Based on these two assumptions, my argument for transformational leadership is developed around five premises:

The means and ends for school restructuring are uncertain. Initial portraits of instructional leadership were, if not exclusively, then certainly heavily classroom-focused; they featured practices intended to *directly* influence classroom curriculum and instruction (Beck & Murphy, 1993; Greenfield, 1987). Such a classroom focus, as far as it went, was a reasonable response to both the dominant educational reform agenda of the time (one closely aligned with the effective schools movement) and the improbability of prevailing school administrator practices to push that agenda forward. Equity, the central goal for reform, was largely pursued in inner city, urban elementary schools. Indicators of success in achieving the goal were defined in terms of advances in basic math and language skills achievement of socially disadvantaged children (e.g., Brookover et al, 1978; Duckett, 1980). Direct forms of instruction, additionally legitimated by the then-current "process-product" research on teacher effectiveness (e.g., Brophy & Good, 1986) seemed uncontestably powerful in developing such skills. So it made sense for school administrators to advocate such instruction (not a hard sell to many teachers) and to supervise teachers closely to ensure its consistent implementation. This focus was fuelled considerably by the energetic work of Madelaine Hunter

and her disciples, work which appeared to arm school administrators with the practical instruments they needed for such supervision (notwithstanding disappointing evidence from field tests of Hunter-driven instructional improvement efforts).

School restructuring is fundamentally different from the change agenda of the late 70's and early 80's. At least much of that earlier change agenda was driven by the effective schools movement. Where this was not the case, implementing new texts or curricula one at a time was often the goal. The important implications for leadership, in relation to both sources of change, are found in the clarity (or illusion of clarity) that advocates had about the changes they wished to make. As Rowan (1990) argues, when the purposes for change are known and agreed upon and the practices required to accomplish those purposes can be clearly specified, one is likely to be successful using control-oriented strategies for change. And the original image of instructional leadership was, above all, aimed at control.

In contrast, however, there is nothing clear about the purposes for school restructuring - higher order thinking or creating schools more responsive to the demands of the 21st century, for example. Nor are the initiatives required to accomplish these purposes, such as site-based management, teacher empowerment, and teaching for understanding (Hallinger, Murphy & Hausman, 1993; Cohen et al, 1993) at all clear. Furthermore, it is by no means certain, even if such initiatives are implemented with integrity, that they will have the kind of generally positive impact on students for which their advocates hope (Hargreaves et al, 1992). Under these circumstances, "commitment" rather than "control" strategies are called for. These are strategies

which help front line school staffs appreciate the purposes for change and which foster their commitment to developing, trying out, and refining new practices until those purposes are accomplished (or until they change). Virtually all treatments of transformational leadership claim that, among its more direct effects, are employee motivation and commitment leading to the kind of extra effort required for significant change (Yukl, 1989).

School restructuring requires both first- and second-order changes. Instructional leadership (by definition) focuses attention on what school improvement researchers refer to as "first-order" changes, changes in core technology. These changes are necessary elements of any reform strategy likely to have payoff for students. Within the school restructuring agenda constructivist models of learning (Leinhardt, 1991), and forms of instruction designed to teach for understanding (e.g., Cohen et al, 1993) are examples of first-order changes. So are the curriculum frameworks that have been generated by many states in the U.S. and by national or regional governments in such countries as Great Britain, Australia and Canada. But there is now an impressive accumulation of evidence demonstrating that an almost exclusive focus on first-order changes is an important part of the explanation for the failure of most change initiatives - especially failure to institutionalize such changes after their implementation. This is a problem recently highlighted in the work of Miles (1993) and Fullan (1993), for example. It is also one of the central tenents in Sarason's (1990) recent book, entitled *The Predictable Failure of School Reform*, and the theme of Susan Fuhrman's (1993) recent collection of papers about designing "coherent" educational policy.

Attention to second-order change is essential to the survival of first order change, otherwise the resulting incoherence becomes unbearable and, like white blood cells, unchanged "standard operating procedures" surround and kill off promising first-order changes. School restructuring is certainly about second order change. That is what site-based management is, for example; if anything, some manifestations of the school restructuring movement might be accused of forgetting about first-order changes. Second-order changes require a form of leadership that is sensitive to organization building: developing shared vision, creating productive work cultures, distributing leadership to others and the like. While images of instructional leadership do not obviously press for attention to such matters, transformational forms of leadership are especially attuned to the influence of, for example, organizational structure and culture on the meaning people associate with their work and their willingness to risk change (e.g., Hunt, 1991).

School restructuring is aimed especially at secondary schools. As compared with a decade ago, the focus for reform has shifted decisively from elementary to secondary schools. This is of consequence for images of school leadership because of the size and complexity of secondary schools and because of the nature of secondary school administrators' practices. The size of secondary schools challenges the feasibility of principals exercising the sort of direct influence on classroom practice envisioned in early views of instructional leadership. There are just too many teachers and classrooms for the time available. Additionally, the complexity of the secondary school curriculum and the amount of pedagogical content knowledge required for expert teaching and its development defies the sort of

comprehensive appreciation that would be required for direct teacher supervision, even if it were feasible to find the time. Furthermore, instructional leadership images were not developed with secondary schools in mind, at the outset, and there has been a surprising lack of research devoted to understanding effective leadership practices in secondary schools. Informal evidence acquired through contact with large numbers of secondary principals in many different provinces, states and countries suggests that most of them, exquisitely sensitive to issues of organizational size and complexity, never did adopt an instructional leadership image of their role as it was advocated in the early 80's. Instead, they learned how to describe a quite different form of leadership which they were practicing, *but using the language of instructional leadership*. Borrowing concepts from James Hunt's (1991) multiple-organizational-level leadership model, instructional leadership appears to exemplify a form of "direct" (production) leadership concerned with maintaining ongoing operations and with planning over a three month to two year timespan. Secondary school principals, however, should expect such leadership from their department heads and be able, themselves, to exercise, in Hunt's terms, "organizational leadership" with planning horizons beyond two years. In any event, it is time the unique challenges of secondary school leadership were addressed more seriously and transformational forms of leadership seem helpful in doing this. The emphasis within such images of leadership on the empowerment of one's colleagues endorses the need of secondary administrators to focus their energies on the capacities and motives of those in a position to offer direct leadership within their organizations as distinct from front line staff.

The professionalization of teaching is a centerpiece of the school restructuring agenda. Such professionalization seems warranted for many reasons, among them: widespread failure of traditional forms of administrative supervision to contribute to teacher development, especially in the future (Sweeney, 1992; Darling-Hammond & Sclan, 1992); the promising effects reported for recent teacher leadership initiatives (Walen & De Rose, 1993; Smylie & Brownlee-Conyers, 1992); and the incentive to join the teaching ranks which such professionalization offers to highly talented prospective candidates (Ogawa, 1993). Instructional leadership demands an active role in classroom practice based on high levels of pedagogical expertise. Because such leadership is exactly what the professionalization of teaching aims to turn over to teachers, other leadership contributions are required of leaders in non-teaching roles. Promising contributions include helping others to develop their instructional leadership potentials, creating structures to foster teacher leadership, fostering productive interpersonal relations and helping develop broadly shared directions in schools toward which teachers' instructional leadership can be directed (Smylie & Brownlee-Conyers, 1992; Little & Bird, 1987). These are effects typically claimed for transformational leadership.

It is not surprising, given these four premises about restructuring, that it has become increasingly difficult to justify instructional leadership images for those in formal leadership roles - principals and superintendents, in particular. Indeed that image is now displaying all the signs of a dying paradigm. As the usefulness of instructional leadership images have been explored across a wider array of contexts, it has become increasingly obvious that their focus on the school's core

technology is too narrow as a guide for the practices of those in principal and superintendent roles. In line with Kuhn's (1970) analyses of of paradigm shifts in the physical sciences, the original concept of instructional leadership has had appendages glued onto it as a response to its shortcomings in an effort to save the basic concept: for example, the expansion of topics within prominent texts on instructional leadership to include vision (Duke, 1987); community relations and professional development (Smith & Andrews, 1989); the inclusion of district office policy initiatives potentially framing classroom instruction as part of superintendents' instructional leadership (Floden et al, 1988; Peterson, Murphy & Hallinger, 1987); and use of the term "indirect instructional leadership" in reference to practices aimed at supporting the leadership of others (Klein-Kacht, 1993; Leithwood, Steinbach & Dart, 1993).

Rather than being awkward afterthoughts, however, appendages glued on to the more recent images of instructional leadership are among the central dimensions of transformational leadership theory (Podsakoff et al, 1990). Such theory is, as a consequence, potentially more powerful and more elegant as a description of effective leadership in the context of school restructuring. Furthermore, the different but nevertheless relatively narrow foci of most other competing images of school leadership are also to be found among the dimensions of transformational leadership.

Framing the Research on Transformational Leadership

Since the early 80's, my own research on school and district leadership has been guided by an overarching and evolving framework which draws attention to the nature, causes and consequences of such leadership. The current form of that framework, used also as a broad guide to our studies of transformational leadership, includes five constructs.

[insert Figure 1 here]

For research purposes, the relationships among these constructs are conceptualized as forming a causal chain with *Leadership Practices* in the center of the chain (Figure 1). These practices are the more or less overt behaviors engaged in by leaders and, moving backwards in the chain, are a direct product of leaders' *Internal Processes*: the past experiences, feelings, beliefs, preferences and thought processes which figure into the leaders' choices of overt behavior. While internal processes are, in part, a product of innate traits as well as personal experiences, they are also shaped by many kinds of *External Influences* (the far left construct in Figure 1): formal training, informal socialization experiences, district policies, staff preferences, the weather, community opinion and a host of other factors have the potential for such influence. Leadership practices, according to Figure 1, potentially contribute to the outcomes which schools aspire to for students (the far right construct) but this potential will almost always be mediated by other people, events or things (second from right) such as teachers' commitment or school culture.

There is nothing especially unique about this framework. Variants on it have been proposed, for example, by Bossert et al (1982) and Yukl (1989). It is a relatively crude guide for leadership research, however, not only in respect to its abstractness, which we have addressed in our work by developing more specific, embedded frameworks, but also in respect to the linearity of relationships among constructs which we have yet to address. Observes Burns:

> *To perceive the working of leadership in social causation as motivational and volitional ... is to percedive not a lineal sequence of stimulus-response "sets" or "stages" .. but a rich and pulsating stream of leadership-followership forces flowing through the whole social process (1978, p. 437).*

Regrettably, our research is not yet sophisticated enough to capture much of the richness of these interacting forces.

The Effects of Transformational School Leadership

Embedded Framework A

Our efforts to assess the effects of transformational leadership, considered as a composite construct (and defined in subsequent sections of the paper) have been guided by the framework depicted in Figure 2. Since it offers a more detailed formulation of the variables and relationships which appear on the right hand side of Figure 1, it is considered to be "embedded" within the general framework.

[insert Figure 2 here]

According to Figure 2, transformational school leadership has both direct and indirect effects on a selected set of outcomes. Some of its

effects are mediated by a set of "in-school conditions", all of which are conceptualized as teachers' attitudes, beliefs, motives or values. The objects of these attitudes, beliefs, etc. are school goals, school culture, school decision-making processes, programs and instruction, policies and organization, and resources. These are mediating variables which have emerged from our research as critical in explaining variation in the success of school restructuring.

Another construct in the framework, "Out-of-school conditions", is conceptualized as having direct effects on selected outcomes as well as effects mediated by school leadership and in-school conditions. Out-of-school conditions are also conceptualized as teachers' attitudes, beliefs, motives or values, in this case about initiatives taken by Ministry/State personnel, district personnel, and relationship between the school and the community. This embedded framework encompasses a commitment-building strategy for school restructuring after Rowan's (1989) useful distinction between control and commitment orientations to change and school redesign (Leithwood, Jantzi & Dart, 1993). The fully specified version of this framework describes those conditions associated with each variable which are perceived by teachers as positively influencing their responses to school restructuring.

Using this framework, we have assessed the effects of transformational leadership most directly in six of our studies[2]. Results summarized here are dominated by the quantitative data collected in these studies even though most generated qualitative data, as well. As Figure 2 also indicates, four sets of outcomes were included in these studies: in reference to Figure 1, the first two of these should be

considered mediating variables. One set consists of a cluster of seven *school restructuring initiatives* common to policy initiatives advocated by both Ontario and B.C. provincial governments. These initiatives include: closer relationships with the community and a stronger voice for parents in school decision-making; modified student grouping practices; development of core curricula; altered student assessment practices; increased student support services; greater curricular integration; and increasing inservice education for teachers.

Teachers' commitment to change, a second set of outcomes noted in Figure 2, was conceptualized after theories of motivation drawn from the work of Bandura (1977; 1986) and Ford (1992). A theoretical explanation was developed for why dimensions of transformational leadership ought to foster conditions underlying commitment; these were conditions related to teachers' personal goals, capacity beliefs (e.g., self-efficacy), context beliefs and emotional arousal processes. Teacher commitment to change is particularly crucial to the types of changes included in the restructuring agenda, for reasons outlined earlier. Shamir argues, further, that "personal commitment is perhaps the strongest of all intrinsic motivators since in the final analysis it is a commitment to one's own self-concept and evaluative standard ..." (1991, p. 92).

Teacher-perceived student outcomes is the third set of dependent variables included in the research. Teachers were asked to rate the extent to which a selected set of specific intellectual and social goals for students, outlined as desirable in policy, were being met as a consequence of teachers' own responses to that policy. Critics argue that such measures are bound to be hopelessly biased and that student

outcomes can only be adequately estimated using independent, objective tests with students. There are two powerful rejoinders to this criticism, however. First, when researchers rely on such tests, practical exigencies usually limit the outcomes measured to those basic math and language skills assessed by existing standardized test data. This artificially narrow definition of dependent measures has received extensive criticism because it so poorly reflects the goals of many schools and certainly most school restructuring initiatives (Reynolds & Reid, 1985; Ousten & Maughan, 1985; Wilson & Corcoran, 1988). Further, although the educational community often assumes significant inaccuracy in teachers' judgements about student learning, there is little empirical warrant for such an assumption. On the contrary, as Egan and Archer note:

> *Since the 1920's, there have been dozens of studies reporting correlations in the order of .5 to .6 between teacher ratings and various standardized tests. These correlations may be considered as coefficients of concurrent validity, and as such they are quite large. (1985, p. 26)*

Finally (the foregoing argument notwithstanding), we also examined the effects of transformational leadership on students directly. Finn's (1989) model of student participation in and identification with school was used as the starting point for conceptualizing this set of dependent variables. The model explains continuing engagement in school as a function of participation in school activities which, along with other influences, results in successful performance. Such performance is esteem building and fosters bonding or identification with the school: this, in turn, mediates a wide range of achievement and behavioral outcomes among students

(Finn & Cox, 1992; Lloyd, 1978). Participation and identification is influenced by student ability and quality of instruction, variables also included in Finn's model. We added to this model a measure of family educational culture including: parent/guardian engagement in relevant school functions; encouragement of children to participate in school; assistance with homework; provision of a physical environment conducive to study; conversation about world events; a healthy diet and adequate sleep (Leithwood & Joong, 1992) - Walberg's (1984) "alterable curriculum of the home". While the early stages of the restructuring initiatives we were studying may have precluded demonstrable effects on many commonly assessed student outcomes, we reasoned that student participation and identification ought to be more sensitive to even modest changes in students' school experiences.

Methods

Four of our six quantitative studies used the same basic methods. In the case of independent and mediating variables, large samples of administrators and teachers working in restructuring schools (achieved samples ranging up to N=289 schools) responded to survey items making up scales to measure each of the variables and incorporated these items into either one or two instruments. These instruments also collected information about two sets of dependent variables (restructuring initiatives and teacher-perceived outcomes). Separate survey measures were administered for the two remaining dependent variables. The model displayed in Figure 2 and a series of more detailed variants were tested through path analysis, typically using the

LISREL VI analysis of covariance structure approach to path analysis and maximum likelihood estimates (Jöreskog & Sörbom, 1981).

Summary of Results

Evidence from the six studies provide both a test of how well embedded framework A (Figure 2) accounted for variation in the four sets of dependent measures and how significant was the transformational leadership construct in that account. Concerning the first of these matters, results indicated that the framework (including leadership, in-school and out-of-school conditions) explained:

- between 40 and 50 percent of the variation on school restructuring initiatives and teachers' commitment to change;
- between 45 and 70 percent of the variation in teacher perceived outcomes;
- no significant amount of variation in students' participation in and identification with school.

Results also indicated that transformational leadership practices, considered as a composite construct:

- had significant direct and indirect effects on progress with school restructuring initiatives, teacher perceived outcomes and teachers' commitment to change;
- when individual school restructuring initiatives were considered separately, transformational leadership had significant total effects on all but one initiative (curriculum integration) and significant direct effects on three (teacher inservice, school-community relations, core curricula);

- when each of three sources of teacher commitment were considered separately, transformational leadership had strong direct and indirect effects on teachers' personal goals: these goals, in turn, had strong direct effects on teachers' context beliefs and weaker but still significant effects on teachers' capacity beliefs (by way of comparison, studies in non-school organizations typically suggest that transformational leadership, especially charisma, accounts for roughly 60% of the common variance in followers' commitment to their organizations' missions - Waldman et al, 1990);
- while in-school conditions typically had the strongest direct effects on most of the dependent variables in our studies (regression coefficients in the .30 to.50 range), these conditions were, in turn, strongly and directly influenced by transformational leadership practices (regression coefficients in the .60 to .70 range). Out-of-school conditions had a similar influence on transformational leadership and direct effects, but of a lesser magnitude on in-school conditions (regression coefficients typically in the .3 to .4 range): they had very weak direct effects on the four sets of outcomes included in the studies.

The Nature of Transformational School Leadership

Embedded Framework B

Although clearly limited in scope and amount, evidence from our studies on the effects of transformational school leadership are encouraging and approximately parallel to the effects reported in non-school organizations (Bass, 1985; Shamir, 1991). But such effects beg the question of just what specific leadership practices or behaviors are

responsible for these effects? This question has been approached in two quite distinct ways: in one series of studies a grounded approach was used to discover the practices used by leaders of schools especially successful in their restructuring efforts. Another series of studies used a theory-testing/theory modification approach. These studies began with Bass' theory of transformational leadership (e.g., Bass, 1985; Avolio & Bass, 1991) modified to reflect school contexts and the results of a comprehensive research review by Podsakoff et al (1990). Dimensions used to define transformational leadership behaviors included:

- *Identifies and articulates a vision*: behavior on the part of the leader aimed at identifying new opportunities for his or her school and developing (often collaboratively), articulating and inspiring others with a vision of the future;
- *Fosters the acceptance of group goals*: behavior on the part of the leader aimed at promoting cooperation among staff and assisting them to work together toward common goals;
- *Conveys high performance expectations*: behavior that demonstrates the leader's expectations for excellence, quality, and/or high performance on the part of staff;
- *Provides appropriate models*: behavior on the part of the leader that sets an example for staff to follow and which is consistent with the values espoused by the leader;
- *Provides intellectual stimulation*: behavior on the part of the leader that challenges staff to re-examine some of the assumptions about their work and to rethink how it can be performed;

- *Provides individualized support*: behavior on the part of the leader that indicates respect for individual members of staff and concern about their personal feelings and needs.

Two further transactional leadership dimensions included:

- *Contingent reward*: the leader tells staff what to do in order to be rewarded for their efforts. While this leadership dimension is viewed by some as transactional, the theoretical possibility of providing informative feedback about performance in order to enhance teachers' capacity beliefs as well as emotional arousal processes makes this set of behaviors potentially transforming, as well.
- *Management-by-exception*: behaviors on the part of the leader in response to problems arising from the practices of others in the school. These behaviors may include active monitoring to detect such problems or a more passive, "laissez-faire" posture in which leaders react only as problems are brought to their attention.

Avolio and Bass (1989), proposing a two-factor theory of transformational leadership, claim that transactional leadership is necessary for organizational maintenance but does not stimulate change. Transformational leadership is value added; in concert with transactional leadership, it provides the leadership resources needed for significant individual and organizational improvement. This is in contrast to Burns (1978), who argued that the two forms of leadership represent opposite ends of the leadership continuum, one form (transactional) largely ineffective.

Method

Methods used for theory-testing were those described in the previous section. Grounded inquiry about the practices of transformational school leaders involved the collection of interview data from teachers and administrators in schools undergoing significant restructuring. In several of these studies, case schools were selected based on the results of previously collected quantitative evidence from teachers indicating both significant progress with aspects of restructuring and high levels of teacher-perceived transformational leadership displayed by principals. This is consistent with the premise that transformational leadership is an attributional phenomenon (Kelley, 1973; Conger, 1989).

These studies form two distinct sets. Among the dependent variables in one set were three mediating, in-school variables: school culture (Leithwood & Jantzi, 1990; Dykes, 1990; à Campo, 1993; Macdonald, 1993); school goals (Heald-Taylor, 1991); and teacher development (Leithwood & Steinbach, 1992; Leithwood, Jantzi & Dart, in press). The second set of studies inquired about the comprehensive set of processes enacted in schools (including leadership processes) to accomplish the multiple outcomes typically associated with restructuring (Leithwood, Dart, Jantzi & Steinbach, 1993; 1992; 1991; Leithwood, Jantzi & Steinbach, 1993). Results of these studies have been reported in the form of causal networks as described by Miles and Huberman (1984).

Summary of Results

Evidence from these two sets of studies help answer three questions. First, *is there support for a two-factor (transformational-transactional) theory of transformational leadership practices in education?* Only one of our studies (Silins, 1992) has addressed this question directly. Based on survey data from British Columbia schools implementing a new Primary Program, the study did find such support. However, the dimension "contingent reward" helped define transformational rather than transactional leadership. Furthermore, while transactional practices built on exchange theory are asserted to be positive elements of a larger set of leadership practices, none of our studies, including the Silins (1992) study, has found positive effects of management-by-exception. Similar results also have been reported in both school (Hoover, 1991) and non-school organizations (Podsakoff et al, 1984; Podsakoff et al, 1982; Podsakoff & Todor, 1985) for at least passive versions of this dimension. As a consequence of this evidence, we:

- no longer distinguish leadership dimensions as transformational or transactional;
- assume contingent reward to be potentially transformational, especially, as King (1989) argues, when such behavior is used in a charismatic or inspirational manner. Other studies have demonstrated a strong association between this dimension of leadership and enhanced commitment, effort and job satisfaction (Spangler & Braiotta, 1990; Singer, 1985);

- have discontinued any further effort to conceptualize or measure management-by-exception as a separate leadership dimension.

These results provide more support for Burns' (1978) conception of transformational and transactional leadership as opposite ends of a leadership continuum than for Avolio and Bass' (1989) conception of them as interdependent and value added.

Our results also addressed a second question: *what are the relative effects of the individual dimensions of transformational leadership?* Most of our quantitative studies, addressing this question by testing more detailed versions of the framework displayed in Figure 2 using path analysis, suggest that:

- the influence of transformational leadership practices on most outcomes included in our research is most strongly accounted for by vision-building and by practices fostering commitment to group goals. The dominance of these dimensions is consistent with evidence about vision-building also reported by Podsakoff (1990), Roueche et al (1989) and Vandenburghe and Staesseus (1991).
- providing individualized support and intellectual stimulation are less influential but still quite significant.
- the effects of contingent reward and high performance expectations appear to be much more context-dependent than the effects of most other dimensions of transformational leadership. Indeed, these two dimensions have negative effects when exercised in circumstances where teacher commitment to restructuring is already high, appearing to create additional pressures on teachers which are interpreted as unhelpful. Podsakoff et al (1990) also reported

negative relationships between high performance expectations and employee trust.

The third question addressed by our results is: *What specific behaviors are associated with the dimensions of transformational leadership?* Space prevents a comprehensive answer to this question. Instead we identify a dimension of transformational leadership which our evidence (along with the work of Sashkin, 1988, and Bennis & Nanus, 1985) suggests should be added to the set proposed by Podsakoff et al (1990) and describe the specific practices associated with it. We define this new dimension as follows:

- *Develops a strong school culture:* behavior on the part of the leader that reinforces beliefs, norms and values concerning the primacy of service to students, continuous professional learning and collaborative problem solving.

While evidence concerning the contribution to a school's effectiveness made by a strong, collaborative school culture is reasonably compelling (Little, 1982; Nias, 1989), there are few empirical studies to inform us about how such cultures develop and, in particular, leadership strategies which contribute to such development: Hunt (1991) also claims this to be the case in relation to non-school organizations. Our own work aside, we are aware of only a handful in schools (e.g., Deal and Peterson, 1990; Kottkamp, 1984; Rosenholtz, 1989; Firestone & Herriot, 1982), although gratuitous advice and testimonials abound. Furthermore, the evidence which does exist suggests that secondary school principals typically have little influence on their schools'

cultures, more likely to be the "shapees" than the "shapers" of that culture (Leithwood, Lawton & Cousins, 1990; Joong, 1990).

Our studies, however, suggest that this need not be the case. There do appear to be at least six clearly definable sets of leadership behaviors that substantially foster a high degree of staff consensus about the norms, values, beliefs and assumptions that shape professional practices in the school:

- *Strengthening the school's culture:* in this category are such behaviors as the collaborative identification of school goals and priorities, reducing teacher isolation and insisting on commitment to the school's mission;
- *Using bureaucratic mechanisms to support collaborative work:* specific behaviors include finding new, and re-allocating old money for such collaboration; planning and scheduling time for collaboration; establishing shared decision-making structures; including the school's values among the criteria for hiring new staff; and careful monitoring of progress with school restructuring;
- *Staff development:* when principals encourage forms of staff development which acknowledge what can be learned from one's immediate colleagues, school culture is strengthened. This usually involves stressing the expertise available within the school;
- *Direct and frequent communication:* specific practices exemplifying this strategy included leaders, using the content of their school's cultures as a central theme in their communication with staffs, students and community members. A high level of redundancy and repetition over long periods of time seems necessary, however,

for such communication to noticeably influence the strength of the school's culture;

- *Sharing power and responsibility with others:* specific practices, in this category, included delegating and, in some instances, giving away sources of power traditionally invested in their positions to, for example, school improvement teams.
- *Using symbols and rituals to express cultural values:* principals do this in three ways: by publicly recognizing the good work of students and staff in public forums; writing private notes expressing appreciation for staff contributions; and by encouraging staff to share their experiences and successful practices with their colleagues.

Differences in school context require considerable flexibility in the application of practices such as these. Furthermore, some sets of practices are more powerful culture builders than are others. For example, in spite of the largely theoretical arguments advocating the use of rituals, storytelling and myths (e.g., Sashkin & Sashkin, 1990; Deal & Peterson, 1990; Firestone & Wilson, 1985), we found this to be the most problematic of the strategies available to school leaders.

Internal Processes Giving Rise to Transformational School Leadership

Embedded Framework C

Our interest in leaders' cognitive and affective states is based on the simple premise that what they do (their practices) depends on what they think and how they feel. This interest predates our current preoccupation with transformational leadership by many years (the

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most comprehensive single source of this research is Leithwood & Steinbach, in press). Not surprisingly, then, attempts to better understand the thinking of transformational school leaders have been framed by the results of this previous research, in particular a model of expert leaders' problem-solving processes developed through that work.

The model is rooted in information-processing orientations to human problem solving and is designed specifically to explain differences in levels of expertise in response to non-routine problems for which the leader possesses relatively little domain-specific knowledge (Frederiksen, 1984; Glaser, 1984). Two general categories of processes are assumed to be involved in problem solving - understanding and solving (Hayes, 1981; Van Lehn, 1989; Voss & Post, 1988). As part of understanding, the model identifies two types of mental activity:

- *Problem interpretation*: a leader's understanding of specifically what is the nature of the problem, often in situations where multiple problems may be identified, and the processes used in arriving at that understanding;
- *Goals*: the relatively immediate purposes that the leader believes he or she needs to achieve in response to his or her interpretation of the problem, and the processes used in arriving at those purposes.

As part of solving, two additional sets of mental activities are identified:

- *Constraints*: "barriers or obstacles" which must be overcome, if an acceptable solution to the problem is to be found and the processes used in identifying those barriers;
- *Solution processes:* what the leader does to solve a problem in light of his or her interpretation of the problem, principles, and goals to be achieved and constraints to be accommodated.

Finally, two aspects of mental functioning appear to be involved in both understanding and solving:

- *Principles/values:* the relatively long-term purposes, operating principles, fundamental laws, doctrines, values and assumptions guiding the leader's thinking and the way they are used in such thinking;
- *Affect:* the feelings, mood and sense of self-confidence the leader experiences when involved in problem solving.

Method

While we have conducted many studies on expert thinking with school and district leaders, only two recent studies have been explicitly carried out with transformational leadership practices as an explicit focus. One of these studies (Leithwood & Steinbach, 1991) employed stimulated recall techniques to explore how principals solved problems in groups. Expert and non-expert samples of principals were interviewed before a staff meeting about the central problem they wished to address, the staff meeting then was audiotaped and the tape played back shortly after the meeting with the researcher, stopping at

the discretion of either principal or researcher to explore aspects of the principal's thinking.

Evidence about the thinking and problem-solving processes of principals rated highly on transformational leadership practices were collected, in the second study (Leithwood & Steinbach, in press). Interviews, semi-structured and approximately one and one-half hours long, asked principals to select a high priority change initiative ("problem") underway in their schools and to talk spontaneously about how they were solving that problem. Because their initiatives were ongoing, the interview was not, strictly speaking, retrospective. As a result, it avoided some of the objections to this type of verbal reporting (Ericsson & Simon, 1984).

Both techniques for collecting evidence about problem solving resulted in verbal protocols which were content analyzed using detailed codes derived from our model of expert thinking.

Summary of Results

Three sets of results from these studies appear noteworthy. The first set comes from a study of ten secondary school principals, all of whom displayed relatively high but, nevertheless, varying degrees of both transformational practice and problem-solving expertise (Leithwood & Steinbach, in press). This study offered substantial confirmation for our claim that by better appreciating the thinking of school leaders, we would be getting at the root explanation of their practices. Relationships between a small portion of the thoughts and practices of "Sarah", rated highest on both expertise and transformational practice help illustrate why we believe this to be so.

At the time of data collection Sarah was 48 years of age, had been a vice principal for 3 years and a principal for 2 years after a 20-year career as teacher and department head. Sarah had been principal of her only and present large (97 staff, 1650 students) secondary school for 2 years at the time she was interviewed. While many changes were underway in the school, Sarah chose to talk about her thinking and practices related to implementation of anti-racist education. For Sarah, this was focal among the many initiatives resulting from a formal needs assessment and "about fifteen, twenty other ways of collecting data" to help in the development of a strategic school plan.

As with most dimensions of transformational leadership, Sarah had been rated very highly by her staff on *identifying and articulating a vision*. The reasons for that rating and why Sarah acted as she did in relation to vision can be explained in terms of her *problem interpretation*. With respect to such interpretation, Sarah's understanding of what anti-racist education would mean in her school and its importance as a priority for the school was arrived at in a highly deliberative fashion: this is clear in her references to data collection and in the systematic way she involved others in interpreting these data. Staff, students, parents, principals of feeder schools and others were all part of this interpretation process, even though she "personally gathered ... all the information together [and spent] about three months, just in the evenings going over things to learn more about the school ...".

A second noteworthy aspect of Sarah's problem interpretation was the link she made between the need for anti-racist education and an even more encompassing purpose, "the whole equity issue we felt was

important" (this link had the quite practical consequence of making her school eligible for additional resources). Third, Sarah's interpretation of the problem, as with other experts we have studied, was quite clear even though she described as "a fluid process" the plan for solving it. "We monitor what we are doing and evaluate it and make changes to our plan, but we do have a general direction that we are heading". And this general direction was conceived of by Sarah in both substantive and procedural terms. Substantively, the problem was, for example, to "...have much greater racial harmony and understanding and appreciation for the various cultures that are represented among our students and staff than we currently do ... We're losing out on some opportunities that we could be taking advantage of if we had a greater understanding of our student body and staff". Procedurally, Sarah described this as a "change problem" and assumed that it would be solved by adapting and applying many of the same techniques she had learned from previous change efforts.

A final noteworthy aspect of Sarah's problem interpretation was its grounding in the broader vision that she was helping to develop for the school. It was a vision which embraced larger community concerns for racial harmony ("... people honoring each other's heritages and cultures ...") but could be acted on quite directly, within the school, through such initiatives as program changes and staff supervisory practices, for example. Nor was it a static vision. As Sarah described it, she and the staff were involved in an ongoing process of "working toward our vision of what this school should be". As well, Sarah believed that, in order for the vision to provide real direction for the staff, it had to be widely shared and understood. In particular, this

aspect of Sarah's problem interpretation process appears to account for high ratings her staff gave her on the transformational leadership practice *identifying and articulating a vision*. Sarah's problem-solving processes provide comparable explanations for other dimensions of her transformational practice.

A second set of results, from this same study of ten secondary principals, showed that most school administrators rated highly by their staffs on dimensions of transformational leadership demonstrated relatively high levels of problem-solving expertise, when compared with our previously collected evidence about the characteristics of such expert thinking. Among the most notable features of such thinking are: deliberate use of systematic problem-solving processes; collection and use of extensive information relevant to a problem; and clarity about one's values, with "consequences for students" at the apex of the values hierarchy and the deliberate use of such values as substitutes for knowledge in the face of novel problems (this evidence concerning the nature and role of transformational leaders' values is quite consistent with Burns' (1978) claim that such leaders are strongly driven by a set of "end values"). Expert thinking is also shaped by a set of attitudes: toward their colleagues as major sources of good ideas; openness to new ideas whatever their source; and self-confidence borne from successful experience.

Nevertheless, not all school administrators demonstrating high levels of problem-solving expertise were uniformly transformational in their leadership practices. This evidence reminds us that, our preoccupation with transformational leadership notwithstanding, effective leadership behaviors are situationally determined to a

significant degree. While transformational practices seem to be a good match with school restructuring contexts, in general, there will be particular school contexts which call for leadership practices not well reflected in the transformational leadership images. All instances of high levels of expertise in the company of less than fully transformational practices could be explained by unique in-school circumstances. This suggests that while school leaders do need to have a large repertoire of practices available to them, it is the quality of their thinking about how and when to apply their repertoire that is central to their effectiveness.

A third set of results is based on a study which compared the group-problem-solving processes of expert and typical samples of principals (Leithwood & Steinbach, 1991). Evidence from this study identified quite dramatic differences in the processes which these two samples used insofar as they were likely to be empowering (or transformative) for teachers. These processes manifest themselves in specific behaviors we class as *providing intellectual stimulation* and *fostering the acceptance of group goals*. Empowerment, in this case, was considered to be a function of three sets of conditions: "collegial rationality", creation of a "zone of proximal development" and development of "commitment through shared goals".

Unlike typical principals, the experts in this study met the conditions of collegial rationality by:

- helping to ensure that their staffs used a broad range of perspectives from which to interpret school problems;

- assisting staffs in identifying a wide range of alternatives and avoiding premature commitment to preconceived solutions;
- ensuring the availability of and attention to good information relevant to the problem being addressed;
- helping staff to avoid biased perspectives (including the principal's).

Vygotsky (1978) defines the "zone of proximal development" as the distance between an individual's existing problem solving capacities and a level of problem solving modelled by a group of one's peers sufficiently more sophisticated so as to be evident yet understandable to the individual. The principals in our expert sample seemed to implicitly appreciate that experience by individual teachers, within such a zone, would enhance their individual problem solving capacities. They provided such experiences by:

- careful planning, in advance of staff meetings, of the problem solving processes to be used;
- outlining explicitly to staff what those processes would be; and
- encouraging individual and group reflection on such processes during and after their use.

The expert sample of principals in this study also fostered greater commitment to school goals by:

- increasing the explicitness of those goals and helping staff interpret problems to be solved in relation to the larger mission of their schools;
- helping staff develop manageable but challenging goals;

- fostering considerable discussion about school goals. In a separate quantitative study, (Heald-Taylor, 1991) we found that the degree of perceived participation in almost all facets of school goal setting explained most of the variation in teachers' commitment to school goals and consensus among staff about the importance of school goals.

Some of these results have been replicated in a recent study of reputationally effective superintendents (Leithwood & Steinbach, 1993).

Conclusion

What do these results imply for leadership theory and research? I conclude with a discussion of several of those implications which I find to be most thought-provoking.

Implications for Theory

Transformational leadership in schools is a "whole cloth". There is nothing especially novel about any one of the individual dimensions of leadership used in our research to define transformational practices. Many other approaches to leadership stress vision building (Sashkin, 1988) or individualized support to staff (Blase, 1989, Marshall, Steele & Rogers, 1993) or the importance of morally-defensible goals (Green, 1987), for example. The substantial effects of transformational leadership which we found, seem attributable to the comprehensive application of all these dimensions: perseverating on one or several dimensions of leadership and ignoring the remainder will not get the job done. Furthermore, while the exercise of all dimensions of

transformational leadership is a matter of degree, there is likely a threshold below which transformational effects are indistinguishable from the effects of non-transformative types of leadership.

Transformational leadership is value added, but not as Avolio and Bass (1989) suggest. Our evidence is consistent with the claim that organizational *type* is an under-looked at and confounding variable in much transformational leadership research. Schools, as members of the category "professional" or "semi-professional" organization, respond differently than do some other types of organizations (e.g., military) to transactional leadership. This is partly explained by the largely intrinsic nature of many sources of teachers' motivation and the tight boundaries around school leaders' opportunities to influence extrinsic sources of teacher motivation. As a consequence, the base of leadership in schools may not be transactional leadership but *individual consideration*. By itself, individual consideration is unlikely to produce much change. But without the trust, loyalty and sense of affiliation produced by these softer (Regan, 1990), more considerative (Blase, 1989) aspects of leadership, the effects of other transformational initiatives are likely to be substantially blunted.

Transformational leadership practices are themselves contingent. While the dimensions of transformational leadership offer a coherent approach to school leadership, specific practices within each dimension vary widely. So, advocating a transformational approach to school leadership does not entail the specification of a uniform or rigid set of leadership behaviors. We observed in our studies, for example, principals who began with a clear vision for their schools, a vision which eventually was adopted by staffs; we also observed schools in

which the vision emerged from a highly participative process with the principal's energies largely devoted to the vision-building process. Both approaches worked well and seemed suitable under the circumstances.

Expert thinking lies behind effective leadership practices and is not contingent. The transformational school leaders we have studied all displayed relatively high levels of problem solving expertise, thought processes the same as "experts" observed in our prior research and similar, in critical respects, to what is known about expertise in many other domains (Glaser & Chi, 1988). While transformational practices are contingent, then, expert thinking is not.

Distinctions between management and leadership cannot be made in terms of overt behavior. This finding is in opposition to arguments favoring a distinction between leadership and management at the level of overt behavior (e.g., Zalesnik, 1989; Bennis & Nanus, 1985). Within transformational leadership theory, transactional practices encompass what usually is thought of as management - attending to the routines and activities that keep the school running smoothly on a day-to-day basis. As Silins' (1992) study found, however, this distinction is empirically problematic and one plausible explanation is that overt practices are essentially uninterpretable in the absence of knowledge about their purposes and their effects. This explanation is consistent with earlier evidence reporting almost no difference between the tasks engaged in by highly effective and more typical school principals, including how their time is distributed across these tasks (Leithwood & Montgomery, 1982). Indeed, most of the overt practices of transformational leaders look quite managerial. Transformational

effects depend upon school leaders infusing day-to-day routines with meaning and purpose for themselves and their colleagues. This, too, is a quality which Burns (1978) argued was central to transforming leadership.

Applied to schools, the dimensions of transformational leadership theory require modification. As noted earlier, these changes include adding a dimension concerned with culture building and deleting management-by-exception. In addition, when transformational leadership theory is applied to schools it needs to acknowledge the compelling evidence which has accumulated in support of an instructional focus on the part of school leaders. This is possible through modifications to the meaning of intellectual stimulation and individualized support. This suggestion also reflects the results of Conger's (1989) study of high level, charismatic executives which awarded considerable weight to their domain-specific expertise and their emphasis on developing that expertise among their colleagues.

Implications for Future Research

The study of leadership from a transformational perspective in K-12 school settings is clearly in its infancy. In the context of undertaking what is intended to be an exhaustive review of completed research, we have been able to identify only 27 empirical and case studies, other than our own, to date, even using a relatively liberal definition of transformational leadership (e.g., Joseph Blase's 1989 and 1993 studies of "open and effective" principals). The bulk of these studies are unpublished dissertations theoretically driven by variations on Bass' (1985) formulation of transformational leadership, two-thirds

employing almost identical survey techniques; 18 of the 27 have been reported within the past five years. Results from this modest corpus of research in combination with our own inquiries give rise to four recommendations.

Subsequent empirical research should compare the explanatory power of competing images of leadership. While there remain many limitations of a theoretical and methodological nature in research carried out to date, the evidence does provide a strong argument for expanding school leadership research in the direction of transformational perspectives. But such an expanded research base should include studies which directly compare the power of competing conceptions of leadership to explain variation in important mediating and dependent variables. For example, the type of work recently reported by Ron Heck and his colleagues (e.g., Heck, Marcoulides & Lang, 1991) exploring the effects of instructional leadership could be expanded with the same samples of school leaders also using measures of transformational leadership. As it stands now, there is evidence of quite positive effects of several forms of school leadership. But because of differences in the choice of dependent variables, research methods and the like in generating such evidence, the effects cannot be compared meaningfully.

Subsequent research should systematically vary the type of change being attempted as a critical determinant of effective leadership practices. Studies of leadership invariably occur in change contexts or it would be difficult to observe any leadership at all. But the nature of the change is a non-trivial variable in leadership research, whereas it often seems to be ignored or treated simply as background. Different

types of change call for different types of leadership, or at least different behavioral expressions of the same type of leadership. What is needed are greater efforts to develop classifications of educational change that are meaningfully related to variations in the effectiveness of different models or perspectives on school leadership. Not to be too Machiavellian about it, this is, in part, a plea for basing the choice of preferred leadership approaches on evidence of "what works" rather than ideological preference.

Subsequent research should emphasize grounded methods. We still have only the most rudimentary understanding of those overt leadership practices which are transformational in school settings. And a narrow focus in subsequent research on testing a priori theories of transformational leadership developed in non-school contexts will not add much to such understanding. So more emphasis should be devoted to what was referred to earlier as the exploration of generic meanings of transformational leadership, a recommendation also made by Hunt (1991) in non-school contexts.

Subsequent research should clarify the thinking of transformational leaders and the variables mediating leadership effects. Perhaps the two most urgent foci for future research are the internal processes giving rise to transformational practices; and those alterable aspects of the school through which transformational leadership makes its contribution to student growth, since all our evidence argues that most leadership effects are indirect. Teachers' commitment to change and organizational learning are among the most promising of these mediating variables. As touched on already, commitment to change serves as the primary motive for school restructuring on the part of

teachers and is influenced by leadership practices. Organizational learning, however, is necessary if such motivation is to actually result in the skillful use of those new practices associated with restructuring: this variable is the central focus of a study we are just now completing, a study which demonstrates that organizational learning, too, can be significantly influenced by particular leadership practices.

Initiatives giving rise to organizational learning and teachers' commitment to change must be counted among the most important of transformational leadership practices.

Notes

1 Jean Brown, Maxine Genge, Bob MacMillan, Alicia Fernandez, Tiiu Raun and Diana Tomlinson

2 Leithwood, Jantzi and Fernandez (in press), Leithwood, Dart, Jantzi and Steinbach (1993), Leithwood, Cousins and Gérin-Lajoie (1992), Jantzi, Silins and Dart (1992), Leithwood, Jantzi and Dart (in press), Leithwood and Jantzi (1990).

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Figure 1:

A Framework for Guiding Programatic Research on Educational Leadership

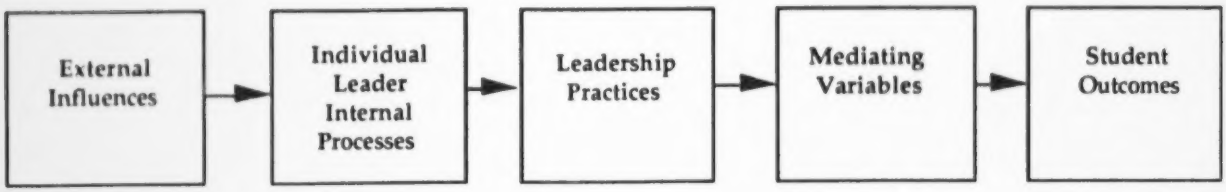

Figure 2:

A Framework for Guiding Research on the Effects of Transformational School Leadership